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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,865	01/16/2004	Raynold M. Kahn	PD-200289	8015
20991 7590 02/09/2007 THE DIRECTV GROUP INC PATENT DOCKET ADMINISTRATION RE/R11/A109 P O BOX 956 EL SEGUNDO, CA 90245-0956			EXAMINER WILLIAMS, KENT L	
			ART UNIT 2109	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/758,865

Applicant(s)

KAHN ET AL.

Examiner

Kent L. Williams

Art Unit

2112

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/16/2004, 2/23/2005, 3/31/2005, 8/1/2005, 10/12/2004, 1/21/2005, 4/20/2005, 1/12/2006, 3/30/2006, 5/3/2006, 9/25/2006, 10/13/2004, 8/10/2004.

DETAILED ACTION

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: The application numbers are absent within the "Cross-Reference to Related Applications." "Among" should be inserted between "content" and "one" on page 5, line 2. "CAM" should be "Conditional Access Module" on page 6, line 26 as it is the first time it is used within the specification. The 8th packet does not coincide with Figure 3A on page 9, line 16, where "video channel 2" should be "audio channel 2." "Non-stationary" should be either "dynamic" or "not static" on page 10, line 24. "Or" should be removed from between "include" and "a media" on page 11, line 20. Please remove ", ER(PK)" from

line 2 on page 13, as it does not relate the sentence. "CP" is not previously defined on page 15, line 28.

Appropriate correction is required.

3. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

Claim Objections

4. Claims 16 and 17 are objected to because of the following informalities: Claim 16 refers to itself, and claim 17 refers to 16. They each do not link to a independent claim. The Examiner has chosen to examine as if they are referring to claim 15. Please correct their reference to avoid a rejection. Appropriate correction is required.

5. Applicant is advised that should claims 10-18 be found allowable, claims 19-27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). The Examiner wishes to note that there is a negligible difference in meaning between an apparatus and an article of manufacture when they have the exact same limitations. However, if the applicant wishes to pursue both sets of claims, the Examiner will honor such a request (given good reason) and forgo an objection under 37 CFR 1.75.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Son et al. (U.S. Patent Application Publication No. 2001/0017920).

Claims 1, 10 and 19, parts A through part D are anticipated by Son et al., elements 502-516, figure 5B, where it is understood that a "copy protection key" can be any key to decode the program material within the client/slave set top box (AKA integrated receiver/decoder). Paragraph 36 contains the detailed description of transferring both the copy protection key and the media to the client. Parts E and F are anticipated by elements 518-522.,

Claims 2, 11 and 20 are anticipated by Son et al. within paragraph 34. It is understood that a media decryption key refers only to the key that encrypted the media, and this is referred to as "A first key" within Son et al.

Claims 3, 12, and 21 are anticipated by Son et al. within paragraphs 29 and 30, where it states that the host-client pairing key is received from the broadcast system on an "off air packet" transmission: "A first key... may have been received from the video on-demand source **402** via a communication channel that is separate from the one used to transmit the video program. (Paragraph 29)." And, "The second key [...] itself may be transmitted from the remote server **404** to the subscriber station **110** while encrypted in a third encrypted form. (Paragraph 30)." It is apparent that both the "host" and the "client" would receive said key.

Claims 4, 13 and 22 are anticipated by Son et al. within paragraph 29 and 30. It is inherent within the use of public key infrastructure (PKI, involving a public & private key set) that each key would be uniquely assigned to a device, whether it is the host or the client. Only within symmetric key cryptography is the key not uniquely assigned.

Claims 5, 14 and 23 are anticipated by Son et al. within paragraph 36. "...the remote server **404** responds by multiplexing the re-encrypted program in the second encrypted form (and the second key if necessary) with other signals to generate a multiplexed signal. (Paragraph 36)." This process is also done between the broadcaster and the server (or host receiver), as illustrated in Figure 5B. Thereby, both the host and client receivers would have to generate the "copy protection key" from the "content information" transferred thereto.

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Claims 6-8, 15-17 and 24-26 are anticipated by Son et al. due to the inherency that content information involving content identification (based on the program materials) and copy control (otherwise known as Entitlement Management) encapsulated in what is typically known as Entitlement Management Messages is used to control the use of the program material in digital video broadcasting. Please see Wasilewski et al. (U.S. Patent No. 6,157,719) that shows inherency of EMM's within conditional access systems, and also see MPEP §2131.01

Claims 9, 18 and 27 are anticipated by Son et al. within paragraph 29 and 30. It is inherent within the use of public key infrastructure (PKI, involving a public & private key set) that each key would be uniquely assigned to a device, whether it is the host or the client. Only within symmetric key cryptography is the key not uniquely assigned to a device.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (U.S. Patent No. 4,633,309), as provided by the applicant, in view of "PKCS #1 v2.1: RSA Cryptography Standard" (referred to as RSA hereinafter).

Li et al. teach the *template* for a localized host/client relationship for sharing content in a conditional access video broadcast system. Specifically, Li et al. teach the use of a master (or "host") integrated receiver/decoder (IRD) to communicate "program materials" to the slave (or "client") IRD.

"Control messages are sent from the central control computer 16 at a frequency of 105.4 MHz. The signals are only receivable at each master decoder, as each slave decoder, although originally identical to the master decoder, is programmed once installed, to only receive control messages at a different frequency... (Column 2, lines 45-68)." Although the control is accomplished in a more primitive way than using cryptography, it teaches the use of a master/slave system in IRD's. Li et al. teach the use of a crippled slave IRD. Although the slave IRD is crippled through software and not lack of hardware, it would be obvious to not include unnecessary hardware for a modern day IRD if Li et al.'s invention were to be built using modern technology.

Li et al. teach the use of a master/slave (or host/client) integrated receiver/decoder for use in conditional access video broadcast systems. However, Li et al. do not disclose the use of cryptography. RSA teaches the cryptographic methods in accordance with the instant application. It would have been obvious at the time the

invention was made to one having ordinary skill in the art to modernize Li et al.'s invention to include cryptographic control of the digital video broadcast in the manner presented within RSA.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Despite the Examiner not citing the following in this rejection, the instant application is NOT considered patentable over the following: EP0936812, EP0989557, WO01/99422, U.S. Patent 6,804,357, and U.S. Patent 5,936,660. Please note that this list is not meant to be exhaustive, and that the prior-art was submitted within the applicant's information disclosure statements.

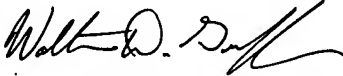
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent L. Williams whose telephone number is 571-272-1376. The examiner can normally be reached on Mon-Fri 7:00-4:30 with Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KLW
1/24/2007


WALTER D. GRIFFIN
SUPERVISORY PATENT EXAMINER